



09/516,653

PATENT**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Brian Doyle
Serial No.: 09/516,653
Filed: March 1, 2000
Title: QUANTUM WIRE GATE DEVICE AND METHOD OF MAKING SAME

Examiner: B. William Baumeister
Group Art Unit: 2815
Docket: 884.524US1

RESPONSE TO RESTRICTION REQUIREMENT

Commissioner for Patents
Washington, D.C. 20231

In response to the Restriction Requirement mailed July 18, 2001, Applicant elects, without traverse, Group II (claims 1-28). Applicant cancels claims 29-38 without prejudice or disclaimer and reserves the right to reintroduce them in one or more divisional applications at a later date.

#5
Election
Amdt
FJONES
8-24-01

Please add the following new claims 39-47. Claims 1-28 and 39-47 are now pending in the above identified patent application.

39. (New) A method of forming a structure comprising:
- forming a plurality of semiconductive channels, each of the plurality of semiconductive channels comprising a channel length and a channel width;
 - forming a dielectric layer upon the semiconductive channel length;
 - forming a source at a first terminal end of the plurality of semiconductive channels;
 - forming a second terminal end of the plurality of semiconductive channels;
 - forming a gate layer over the dielectric layer, wherein electron flow in the plurality of semiconductive channels has a mean free path that is greater than the semiconductive channel width, and wherein a first semiconductive channel of the plurality of semiconductive channels is spaced apart from a second semiconductive channel of the plurality of semiconductive channels by a trench that is less than about five times the semiconductive channel width.

RECEIVED
AUG 23 2001
TECHNOLOGY CENTER 2800